The sequence of repnumbers n with property that the number of primes 30k+11 and 30k+13 up to n is equal

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Abstract. In my previous paper "Conjecture involving repunits, repdigits, repnumbers and also the primes of the form 30k + 11 and 30k + 13" I conjectured that there exist an infinity of repnumbers n (repunits, repdigits and numbers obtained concatenating not the unit or a digit but a number) for which the number of primes up to n of the form 30k + 11 is equal to the number of primes up to n of the form 30k + 13 and I found the first 18 terms of the sequence of n (I also found few larger terms, as 11111, 888888 and 11111111 up to which the number of primes from the two sets, equally for each, is 167, 8816, respectively 91687). In these paper I extend the search to first 40 terms of the sequence.

The sequence of the repnumbers n (repunits, repdigits and numbers obtained concatenating not the unit or a digit but a number) for which the number of primes up to n of the form 30k + 11 is equal to the number of primes up to n of the form 30k + 13:

(in the bracket is the number of primes up to n, equally for each of to the two sets)

: 22 (1), 33(1), 44(2), 55(2), 66(2), 77(3), 88(3), 99(3), 111 (4), 222(6), 333(9), 444(11), 666(15), 777(17), 1818(36), 2020(39), 2828(52), 2929(53), 3030 (54), 3535 (61), 3939(69), 4242(73), 5656(97), 5757(99), 5959(101), 6464(107), 6868(114), 6969(115), 8383(132), 9393(146), 9494(149), 9696(151), 9797(152), 9898(153), 9999(154), 11111(167), 22222(315), 190190(2157), 191191(2166), 191919(2174)...

Few larger such repnumbers n:

: 223223 (2492); 446446 (4693); 665665 (6756); 888888 (8816); 11111111 (91687).

Note:
Whether or not the conjecture above is true, the equal distribution of the two sets of primes up to such large numbers confirms the value of the classification of primes in the following 8 sets: 30k + 1, 30k + 7, 30k + 11, 30k + 13, 30k + 17, 30k + 19, 30k + 23 and 30k + 29.